

ABSTRACT OF THE DISCLOSURE

An improved high frequency filter of coaxial construction comprises one or more resonators ~~(R)~~ having the following features: an electrically conductive internal conductor configured as an internal conductive tube ~~(1)~~; and an electrically conductive external conductor ~~(2)~~; an ~~An~~ electrically conductive base ~~(3)~~ which electrically interconnects the internal conductor and the external conductor ~~(2)~~; a ~~A~~ cover ~~(5)~~ covering ~~covers~~ the high frequency filter with respect to the base ~~(3)~~; and having an inner side ~~(5a)~~ and outer side ~~(5b)~~, the ~~The~~ inner side ~~(5a)~~ pointing ~~points~~ toward a free end ~~(1a)~~ of the internal conductive tube ~~(1)~~; wherein a ~~A~~ dielectric layer ~~(6)~~ having a dielectric constant E_r greater than 2 is arranged between the outer side ~~(5a)~~ of the cover ~~(5)~~ and the free end ~~(1a)~~ of the internal conductive tube ~~(1)~~; and ~~the~~ The radial extent of the dielectric layer ~~(6)~~ substantially covering ~~covers~~ the cross section of the internal conductive tube ~~(1)~~ at the free end ~~(1a)~~ thereof.